

5    Claims.

1. Nozzle for supporting a weft thread in a weaving machine, provided with a flow-through canalisation (17) for a fluid flowing out in at least one outlet opening (18), characterised in that the nozzle (3) is at least partially composed of segments (19-20-30-37-47-52).
2. Nozzle according to claim 1, characterised in that the outer shape of the nozzle (3) and the inner shape, in other words the shape of the flow-through canalisation (17) are different from each other and in that the aforesaid segments (19-20-30-37-47-52) determine the aforesaid inner shape.
3. Nozzle according to claim 1 or 2, characterised in that the segments (19-20-30-37-47-52) are plate-shaped, in particular in that they consist of plates.
4. Nozzle according to any of the preceding claims, characterised in that the segments (19-20-30-37-47-52) are held in casing (29).
5. Nozzle according to any of the preceding claims, characterised in that at least a number of the segments (19-20-30-37-47-52) are mutually connected.

- 5 6. Nozzle according to any of claims 1 to 4, characterised in that at least a number of the segments (19-20-30-37-47-52) are pressed loosely against each other.
- 10 7. Nozzle according to any of the preceding claims, characterised in that the segments (19-20-30-37-47-52) extend in the longitudinal direction of the nozzle (3).
- 15 8. Nozzle according to claims 3 and 7, characterised in that the plate-shaped segments (19-20-30-37-47-52) are situated such that they are directed with one edge (21) towards the side of the nozzle (3) in which the outlet opening or outlet openings (18) are situated.
- 20 9. Nozzle according to any of the preceding claims, characterised in that the nozzle (3) has one or several parts composed by means of the segments (20-37-47) forming one or several partition walls (35-51) in the flow-through canalisation (17).
- 25 10. Nozzle according to claim 9, characterised in that the nozzle (3) has at least two outlet openings (18), whereby the above-mentioned partition wall or partition walls (35-51) define separate ducts (39-40-41) towards the respective outlet openings (18) and/or groups of outlet openings (18).
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11. Nozzle according to claim 10, characterised in that the aforesaid partition wall, partition walls (35-51) respectively, extend up to the side (22) where the outlet openings (18) open into the environment.

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12. Nozzle according to any of claims 9 to 11, characterised in that one or several of the aforesaid partition walls (35-51) are made as a longitudinal partition.

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13. Nozzle according to claim 12, characterised in that the partition walls (35) provide for a lateral division of the flow-through canalisation (17) in ducts (39-40-41).

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14. Nozzle according to any of claims 9 to 13, characterised in that the flow-through canalisation (17) generally extends in the longitudinal direction of the nozzle (3) and traces a curve near the top end to finally flow into the outlet opening or outlet openings (18), and in that one or several of the aforesaid partition walls (35-51) extend through at least a part of the aforesaid curve.

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25 15. Nozzle according to any of claims 9 to 14, characterised in that at least one of the aforesaid partition walls (51) is made as a cross partition and in particular as a blade-shaped guide near the outlet opening or outlet openings (18).

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16. Nozzle according to any of claims 9 to 15,  
characterised in that at least one of the aforesaid  
partition walls (35-51) extend crosswise in one piece  
from one side to the other side of the flow-through  
canalisation (17).

17. Nozzle according to any of claims 9 to 16,  
characterised in that mainly all the partition walls  
(35-51) extend downward up to a distance (A) from the  
outlet opening or outlet openings (18) which is  
larger than the hair length of the hairs (48) which  
are usually found on textile fibres, in particular up  
to a distance (A) of about 1 cm.

18. Nozzle according to any of the preceding claims,  
characterised in that the segments, as well as any  
partition walls (35) formed thereof, consist of  
plate-shaped elements or the like which extend  
slantingly at an angle (H) according to a general  
direction which, when the nozzle (3) is mounted in a  
weaving machine, extends slantingly towards the reed  
of the weaving machine.

19. Nozzle according to any of the preceding claims,  
characterised in that at least one of the aforesaid  
segments (19-20-30-37-47-52) is made as an  
intermediate connection forming a reinforcement for  
the body (49) of the nozzle (3), at least in the  
central part (50) thereof.

20. Nozzle according to any of the preceding claims,  
characterised in that the nozzle (3) has segments  
(19-20-30-37-47-52) and possibly partition walls (35-  
51) formed thereof which, thanks to their direction  
5 and/or shape, serve as guiding elements to direct the  
fluid jet (8) leaving the outlet opening or outlet  
openings (18) when the nozzle (3) is in use.

21. Nozzle according to any of the preceding claims,  
10 characterised in that the segments (19-20-30-37-47-  
52) are formed of straight, mainly flat elements  
which are placed against each other.

22. Nozzle according to any of the preceding claims,  
15 characterised in that the nozzle (3) has segments  
(19-20-30-37-47-52), and possibly also partition  
walls (35-51) formed thereof, which consist of  
elements, in particular plates or the like, having  
varying thicknesses and/or shapes which are different  
20 from a flat shape.

23. Nozzle according to any of the preceding claims,  
characterised in that the nozzle (3) has a series of  
outlet openings (18) which are arranged step-like, by  
25 means of the segmented construction, from one far end  
of the series to the other far end thereof.

24. Nozzle for supporting a weft thread in a weaving  
machine, provided with a flow-through canalisation  
30 (17) for a fluid flowing out in at least one outlet  
opening (18), characterised in that it has one or a

combination of two or more of the following characteristics:

- 5       - that the nozzle (3) is provided with at least two outlet openings (18), whereby at least one either or not partition wall of one piece (35-51) is present in the top part of the nozzle (3) separating at least the two outlet openings (18), at least as of a point situated inside the actual flow-through canalisation (17) up to the outer wall, or practically up to the  
10       outer wall where the outlet openings (18) open in the environment;
- that the nozzle (3) is provided with one or several partition walls (35-51) extending in the longitudinal direction of the flow-through canalisation (17),  
15       whereby these partition walls (35-51) extend crosswise and continue materially from one side of the flow-through canalisation (17) up to the opposite other side;
- that the nozzle (3) is provided with at least one  
20       partition wall (51) made as a cross partition in the shape of a blade-shaped guide near the outlet opening or outlet openings (18);
- that the nozzle (3) is provided with one or several partition walls (35-51), and that at least a number  
25       thereof extend downward up to at least a distance (A) from the outlet opening or outlet openings (18), which is larger than the hair length of the hairs (48) which are usually found on textile fibres, in particular up to a distance (A) of about 1 cm;
- 30       - that the nozzle (3) is provided with at least an intermediate connection extending through the flow-

through canalisation (17) and forming a reinforcement for the body (49) of the nozzle (3);

- 5       - that the nozzle (3) is provided with a series of outlet openings (18) which are arranged in a step-like manner from one far end of said series to the other far end;
- 10       - that the nozzle (3) has a head part, whereby partition walls (35-51) are present in the flow-through canalisation (17) of this head part which, as a result of their direction and/or shape, function as guiding elements to direct the fluid jet (8) leaving the outlet opening or outlet openings (18) when the nozzle (3) is in use.